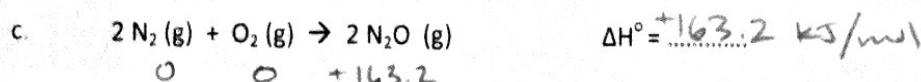
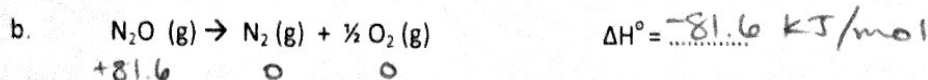
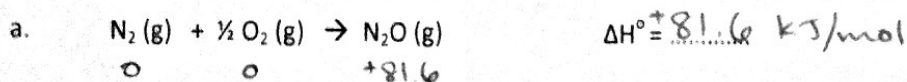


## T05D05 - Enthalpy of Combustion, Neutralization, etc

Name KEY

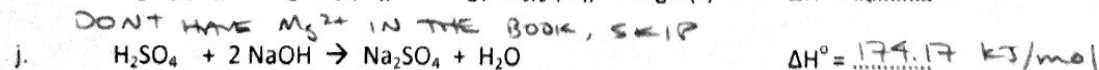
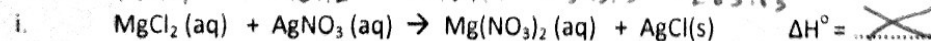
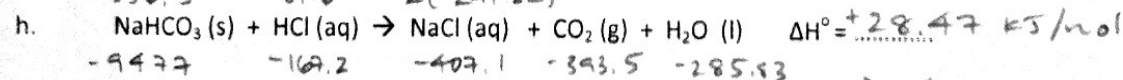
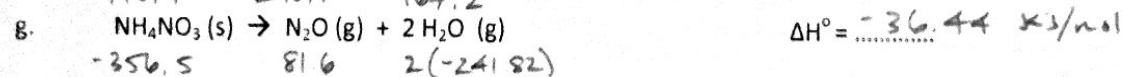
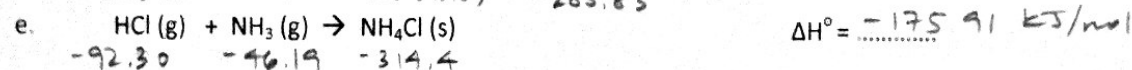
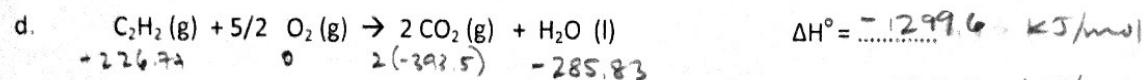
Remember, both combustion AND neutralization are exothermic reactions. When using table 12 of your IB Chemistry Data Booklet you will find that each  $\Delta H_c^\circ$  value has a negative sign (exothermic).

1. Using the tables given out (has more than the data booklet) calculate the enthalpy change  $\Delta H^\circ$  for each of the following reactions. All are at standard conditions [298 K and 1 atm]

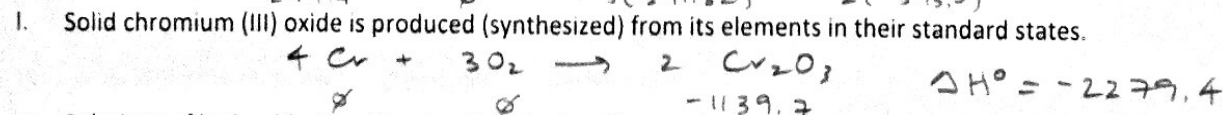
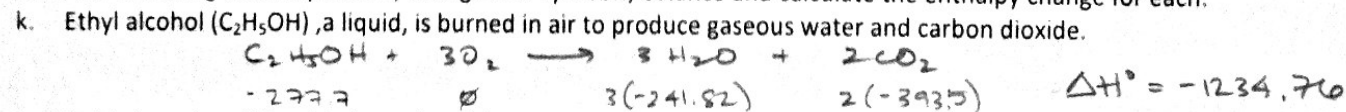


Rules of thermochemistry are:

1. If you multiply the reaction, you must multiply  $\Delta H$  as well.
2.  $\Delta H$  of a rxn is  $-\Delta H$  for the reverse reaction



Take the following word equations, change into symbols, balance and calculate the enthalpy change for each.



m. Solutions of hydrochloric acid and sodium hydroxide are mixed.

